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W114 : Coffee

The Coffee Microarray Project: A New Tool To Discover Candidate Genes Correlated To Quality Traits

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Coffee is a product of mass consumption, with worldwide consumption estimated at 2.2 billion cups per day. The annual turnover generated is approximately 25 billion Euros and so coffee is the third biggest source of international trade, after oil and cereals. Coffee trees have not, however, resulted in any significant seedling industry involvement, which is in sharp contrast with their economic importance. However, biotechnology tools used for improving other species with economic impact are gradually adapted to coffee trees and used for guiding and improving coffee trees performances. Over the past few years, Coffee research programs also include Functional Genomics studies for the discovery of the genes and biosynthesis pathways involved in characteristics of agricultural, industrial or qualitative interest. The Coffee Microarray Project is based on scientific collaboration between NESLTE and CIRAD/IRD granted by ANR (National Research Agency) via GENOPLANTE.
PUCE CAFE project has two main objectives 1) Create the first Coffee 16 K oligo microarray and 2) validate and use this new tool to analyze gene expression patterns during coffee grain maturation in *Coffea arabica* and *Coffea canephora* (robusta).